



- 1 A Word from the Chairman**  
*by Richard B. Myers*
- 9 A Quiet Revolution: Nuclear Strategy for the 21<sup>st</sup> Century**  
*by James J. Wirtz and James A. Russell*

- 16 Army SOF in Afghanistan: Learning the Right Lessons**  
*by Frank L. Jones*
- 23 Millennium Challenge 2002—Setting the Mark**  
*by Grover E. Myers*



## JFQ FORUM

- 31 The Military Uses of Space**
- 32 National Security Space—Enabling Joint Warfighting**  
*by Peter B. Teets*
- 38 Forging Space Warriors**  
*by Lance W. Lord*
- 44 Architecting Space Programs**  
*by Stephen J. Ferrell and Hal E. Hagemeier*
- 50 Space and Missile Defense**  
*by Donald R. Baucom*
- 56 Some Propositions on Spacepower**  
*by Michael V. Smith*
- 65 Globalizing Space Security**  
*by Simon P. Worden and Joan Johnson-Freese*
- 72 Finding a Path to Spacepower**  
*by John M. Logsdon*

## PHOTO CREDITS



The cover shows lift off of Delta II rocket from Cape Canaveral (Boeing). The front inside cover features [clockwise] soldier, Enduring Freedom (55<sup>th</sup> Signal Company/Leopold Medina, Jr.); sailor aboard USS *Harry S. Truman*, Iraqi Freedom (USS *Harry S. Truman*/Danny Ewing, Jr.); marine during live fire exercise (Fleet Combat Camera, Pacific/Michael Sandberg); and airman monitoring air traffic, Iraqi Freedom (U.S. Air Force/Stefan Alford). The table of contents depicts universe seen from Hubble Space Telescope (AP/Wide World Photo/NASA); and Global Hawk UAV at air base in

Australia (U.S. Air Force/Jeremy Lock). The back inside cover captures USS *Providence* sailing home to New London (U.S. Navy/Nicole Hawley).

- 78 Unity of Effort in Joint Information Operations**  
*by Synthia S. Jones, Bernard Flowers, and Karlton D. Johnson*
- 84 Deterring Attack: The Role of Information Operations**  
*by Gregory Schulte*

**MILITARY TRANSFORMATION****90 Joint Doctrine—Engine of Change?***by Stephen J. Cimbala and James J. Tritten***96 Transforming Joint Exercises and Readiness***by Stephen J. Mariano***102 Intelligence Support for Military Operations***by Markus V. Garlauskas***109 Unmanned Combat Aerial Vehicles and Transformation***by John J. Klein***114 An Israeli Military Innovation: UAVs***by Ralph Sanders***119 Educating Foreign Officers***by Douglas M. Gibler and Tomislav Z. Ruby***OF CHIEFS AND CHAIRMEN****124 Creighton Williams Abrams, Jr.****THE JOINT WORLD****125 Doctrine****OFF THE SHELF****126 War and the Human Psyche: A Review Essay***by Ian Roxborough***127 Great Power Struggles: A Book Review***by George C. Herring***128 The Chiefs as Policymakers: A Book Review***by Samuel J. Newland***129 Soldiers as Governors: A Book Review***by Audrey Kurth Cronin***Joint Force Quarterly****Stephen J. Flanagan**

Director  
Institute for National Strategic Studies  
*Editor-in-Chief*

**Martin J. Peters, Jr.***Production Coordinator***Robert A. Silano**

Director of Publications  
Institute for National Strategic Studies  
*Editor*

**Calvin B. Kelley***Copy Editor***Lieutenant Colonel Peter L. Hays, USAF***Executive Editor***William A. Rawley**

U.S. Government Printing Office  
*Art Director*

*JFQ* is published for the Chairman of the Joint Chiefs of Staff by the Institute for National Strategic Studies, National Defense University, to promote understanding of the integrated employment of land, sea, air, space, and special operations forces. The journal focuses on joint doctrine, coalition warfare, contingency planning, combat operations conducted by the unified commands, and joint force development.

The opinions, conclusions, and recommendations expressed or implied within are those of the contributors and do not necessarily reflect the views of the Department of Defense or any other agency of the Federal Government. Copyrighted

ISSN 1070-0692

portions of this journal may not be reproduced or extracted without permission of copyright proprietors. An acknowledgment to *Joint Force Quarterly* should be made whenever material is quoted from or based on its contents.

This publication has been approved by the Secretary of Defense. All previous issues have been published electronically and are available over the Internet at the address indicated below. Paid subscriptions to *JFQ* are offered through the U.S. Government Printing Office.

The editors invite articles and other contributions on joint warfighting, interservice issues that support jointness, and

topics of common interest to the Armed Forces (see page 132 for details). Please direct all editorial communications to:

Editor, *Joint Force Quarterly*  
ATTN: NDU-NSS-JFQ  
300 Fifth Avenue (Bldg. 62)  
Fort Lesley J. McNair  
Washington, D.C. 20319-5066

Telephone: (202) 685-4220 / DSN 325-4220  
Fax: (202) 685-4219 / DSN 325-4219

e-mail: JFQ1@ndu.edu

[http://www.dtic.mil/doctrine/jel/jfq\\_pubs/index.htm](http://www.dtic.mil/doctrine/jel/jfq_pubs/index.htm)

April 2003